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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/606,235

06/25/2003

Dean F. Jerding

A-8573

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7590

07/20/2004

SCIENTIFIC-ATLANTA, INC.
INTELLECTUAL PROPERTY DEPARTMENT
5030 SUGARLOAF PARKWAY
LAWRENCEVILLE, GA 30044

EXAMINER

BATAILLE, PIERRE MICHE

ART UNIT

PAPER NUMBER

2186

DATE MAILED: 07/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|---|---------------------------------------|--|
| Office Action Summary | Application No. 10/606,235 | Applicant(s) JERDING ET AL. | |
| | Examiner Pierre-Michel Bataille | Art Unit 2186 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10 is/are allowed.
- 6) ☒ Claim(s) 11-15, 17 and 19-38 is/are rejected.
- 7) ☒ Claim(s) 16 and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>6/22/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This Office Action is taken in response to application for patent dated June 25, 2003. Applicant's amendments and/or argument have been considered with the results that follow.
2. Claims 1-38 are pending in the application under prosecution. Acknowledgement is noted of the filing for priority application based on application 09/564,974, filed on May 4, 2000.
3. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors.

Claim 1: it appears that "requiring" should be changed to – occupying – for consistency with the rest of the claim.

Claim 20 is a redundant copy of claim 17.

Please note that these are merely exemplary, Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 11-15, 17, and 19-38 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,563,648 (Menand et al).

With respect to claims 11-12, 26 and 38, Menand teaches communication system and method (**Fig. 1**) comprising: a client (**audio video interactive (AVI) television receiver**) and a server (**outside computer system 55**) establishing a bi-directional communication pathway inbetween, the client having a tuner (10), the client being capable of receiving broadcast information (**processor in the television receiver receives the interactive application program information from the broadcaster**) and the server having an executable application (**the broadcast location including the computer system for generating interactive application program information, including executable code and data**) [Col. 1, Lines 15-20], the executable application requiring an amount of memory for proper execution (**flow operating system requesting a memory allocation from a memory manager of sufficient size**) [Col. 7, Lines 20-28], a memory manager in the client, the memory manager being configured to determine whether the client has sufficient available memory for proper execution of the executable application, the server being configured to transmit the executable application in response to the memory manager determining that the client has sufficient memory for proper execution of the executable application (**flow operating system determining sufficient memory to load the application program**) [Col. 7, Lines 40-42; Col. 10, Lines 35-42; Col. 14, Lines 45-67].

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With respect to claim 13, Menand teaches the memory is a volatile memory [Col. 3, Lines 53-58; Col. 7, Lines 5-7].

With respect to claims 14, 27, Menand teaches allocating the required amount of memory from the available memory in response to determining that the client has sufficient available memory for proper execution of the executable application; and requesting the executable application from the server upon allocating the required amount of memory (*flow operating system requesting a memory allocation from a memory manager of sufficient size, determining sufficient memory available and request allocation of the module upon the determining factor*) [Col. 7, Lines 19-59; Col. 10, Lines 20-46].

With respect to claim 28, Menand teaches determining, in response to determining that the client has insufficient available memory for execution of the executable application using the normal amount of memory, whether the client has sufficient available memory for execution of the executable application using the reduced amount of memory [Col. 7, Lines 19-59; Col. 10, Lines 20-46].

With respect to claims 15, 17, 19-23, 29-32, 34-36, Menand teaches purging data contained in the memory in response to determining that the client has insufficient available memory for proper execution of the executable application, and determining, in response to purging the data, whether the client has sufficient available memory for

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proper execution of the executable application (***deallocating the oldest memory block first or first deallocating memory blocks marked as expendable by the originating application in an attempt to derive sufficient memory space***) [Col. 14, Lines 57-67; Col. 6. , Lines 10-18].

With respect to claims 24-25, 33, and 37, Menad teaches compacting a private or system heap in response to determining that the client has insufficient available memory for proper execution of the executable application; and determining, in response to compacting the system heap, whether the client has sufficient available memory for proper execution of the executable application (***minimization of the application program with the application program deallocating its resources and maintaining only a minimal presence in the processing element***) [Col. 6. , Lines 10-18; Col. 14, Lines 25-57].

Allowable Subject Matter

6. Claims 16, 18, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claims 1-10 are allowable.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 5,517,643 (Davy) teaching method of allocating memory among a plurality of processes of a computer system.

US 5,768,539 teaching downloading applications software through a broadcast channel.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre-Michel Bataille whose telephone number is (703) 305-0134. The examiner can normally be reached on Tue-Fri (7:30A to 6:00P).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew M. Kim can be reached on (703) 305-3821. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Pierre-Michel Bataille
Primary Examiner
Art Unit 2186

July 13, 2004